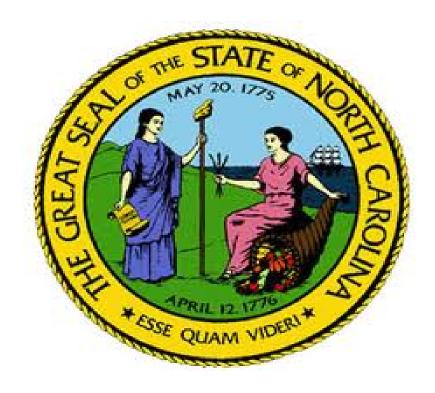
FCC & North Carolina E-rate Presentation

Lieutenant Governor Dan Forest Superintendent Dr. June Atkinson



From the Executive Branch

- Chairman of both the eLearning Commission & SBE Special Committee on Digital Technology
- NC positioned for success
 - Pipeline to all of our LEAs
- General Assembly 2017/18 Mandate
 - Digital text books, 100% connected, 1:1 devices
- Mooresville, blue print
 - White House started in NC → Let's finish in NC

Thank You FCC & USAC

RECENT NORTH CAROLINA E-RATE FUNDING HISTORY

Year	Requested Amount	Committed Amount	Pending Amount	Rejected (Mostly Priority 2)
2013	\$114,413,491.34	\$74,090,835.78	\$7,516,619.07	\$32,806,036.49
2012	\$122,046,334.42	\$88,548,118.06	\$0.00	\$33,498,216.36
2011	\$111,580,974.31	\$79,351,914.12	\$0.00	\$32,229,060.19
2010	\$96,539,783.23	\$88,512,523.05	\$0.00	\$8,027,260.18
2009	\$84,383,889.89	\$70,126,046.66	\$0.00	\$14,257,843.23
2008	\$78,539,107.48	\$63,654,530.68	\$0.00	\$14,884,576.80

Wednesday, March 12th, 2014

School Connectivity Initiative

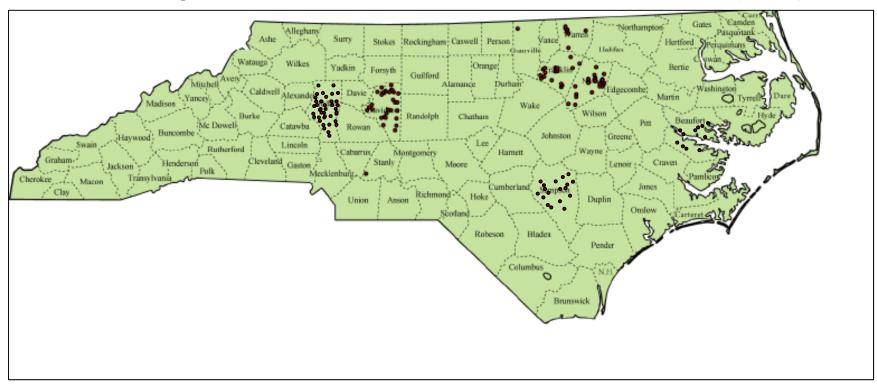
- North Carolina School Connectivity Initiative
 - Support from state since 2005
 - Educators, Business, Policymakers involved
 - \$20 Million of state funding for sustainability
 - Funding prioritized by McCrory administration

Results

- 100% of districts with scalable broadband
- 95% of schools with fiber (~97% July 1, 2014)
- Implementation of cloud based services
- Scalable backbone network with owned fiber

School Connectivity Results

Remaining North Carolina Schools without fiber connections (~124)



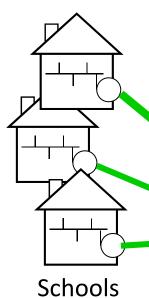
This is due to long-term Conterra or Star Wireless WWAN (~150 Mbps) contracts Franklin County Schools moved/moving to fiber WAN this school year Davidson & Sampson moving to fiber July 1, 2014. Beaufort six sites fiber July 1, 2014 Note: Approx. half of charter schools did not report (handful not fiber) ~950 Mbps - Average WAN circuit speed in North Carolina September 2013

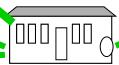
School Connectivity Initiative (SCI)

- ✓ School connections (WAN)
- ✓ LEA/Charter connections (Internet access)
- ✓ Content filtering
- ✓ Firewall services
- ✓ Monitored and upgraded with growing demand
- ✓ E-rate training and support
- ✓ Network engineering support
- √ \$20 M annual appropriation



Internet



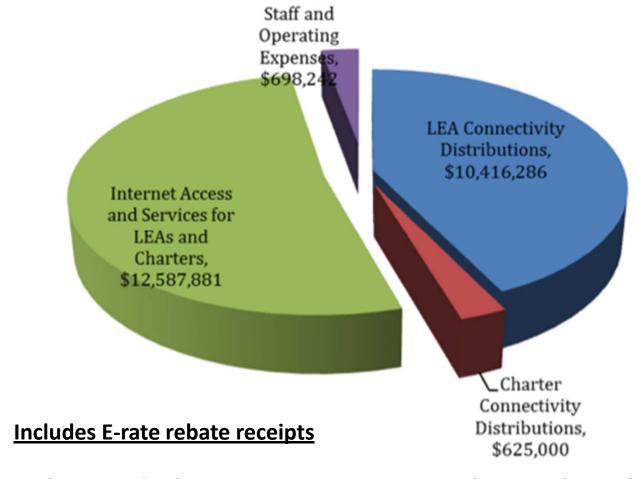


LEA/Charter Central Connection point

North Carolina Content

- •NC Virtual Public School
- Home Base
- Online Assessment
- Other online instructional services and content
- State agency content

2012-13 SCI Spending

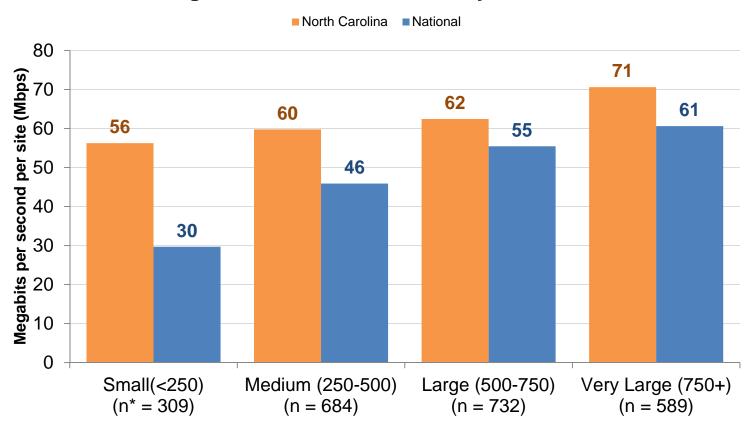


From the 2013 School Connectivity Initiative Report to the General Assembly, 01/2013

Bandwidth per classroom in North Carolina is higher than the national average across all school sizes



Average Classroom Bandwidth by School Size

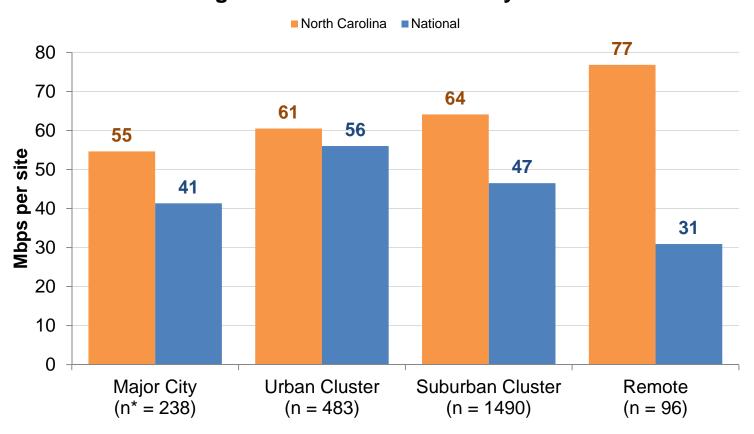


^{*}n = number of schools and Includes only schools from North Carolina. North Carolina ESH SST Month November 11, 2013 – December 11, 2013.

North Carolina has done a good job of getting access to all schools, but urban schools face challenges of scale



Average Classroom Bandwidth by Locale

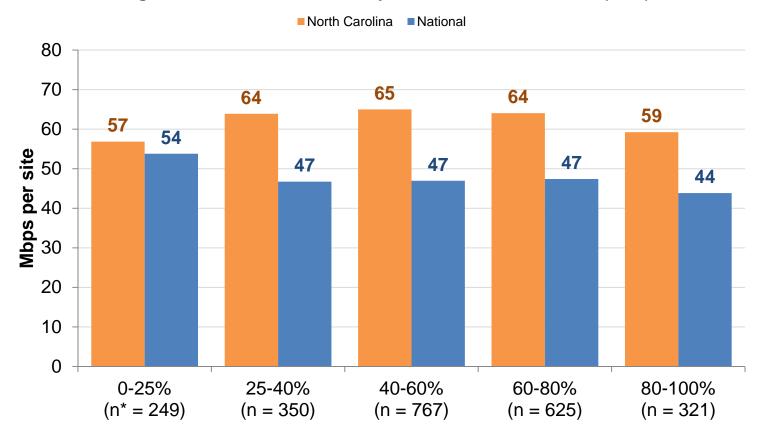


^{*}n = number of schools and Includes only schools from North Carolina.

Nationally, average bandwidth decreases across FRL categories – but it stays consistent in North Carolina



Average Classroom Bandwidth by Free & Reduced Lunch (FRL) %

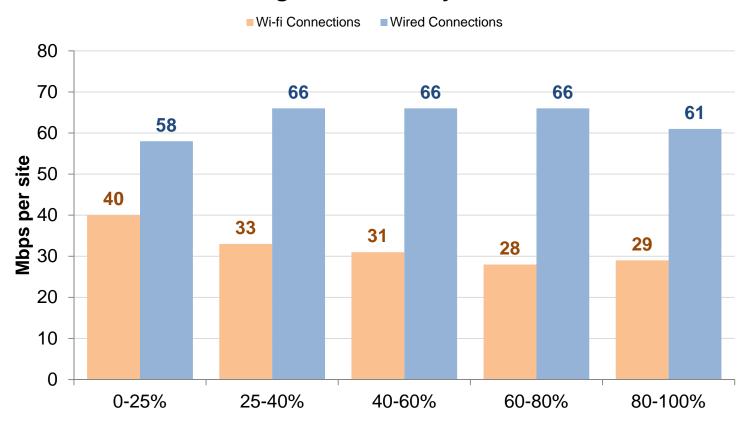


^{*}n = number of schools and Includes only schools from North Carolina.

Although wired connection speed is consistent across all FRL categories, measured Wi-Fi speeds decrease



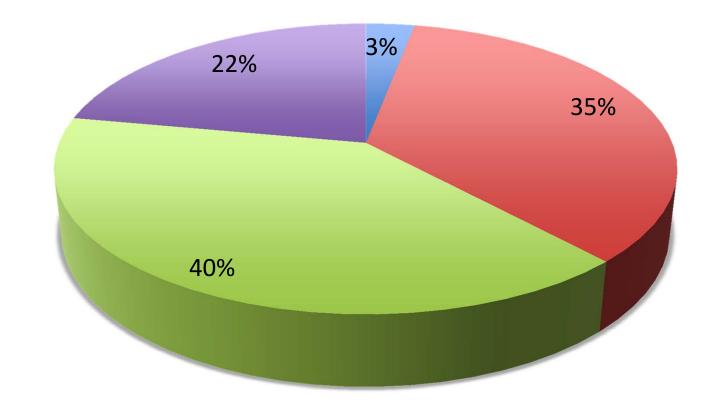
Average Bandwidth by FRL %



North Carolina schools only.

Distribution of Wireless Coverage





New FY2014 Form 471 Wireless Data Collection – "Coverage" not same as high density.

Findings: Level of Wireless Coverage

- 70 schools: no wireless coverage
- 818 schools: marginal coverage
 - 1 Access Point (AP) for 3+ classrooms
- 928 schools: intermediate coverage
 - 1 AP for 2 classrooms
- 515 schools: high density (preferred)
 - Sufficient coverage to implement 1:1 programs campus-wide
 - Includes 20% of high schools; 16% of middle schools and 5% of elementary schools
 - 1 or more APs per classroom

Request

- Demonstration E-Rate V2.0 and ConnectED
- FCC-one Time Capital for Classroom Upgrades
 - Transition from funding only pipes to funding connectivity
 - Incorporate Managed School Networks
 - Transition from Priority system to meeting current need
- North Carolina- refresh & sustaining funding
- North Carolina provides data to FCC
 - Test process for distribution of funds
 - Track return on investment
 - Assess sustainability requirements
- Began in Mooresville showcase ConnectED in NC

Key Contacts

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